DoD Space Planning Criteria for Health Facilities
Pathology

5.3.1. PURPOSE AND SCOPE:

This section provides draft guidance for the space planning criteria for pathology activities in DoD medical facilities. Pathology criteria provide the specialized environment and facilities for the receipt, processing, and qualitative/quantitative laboratory analysis of all inpatient and outpatient pathological specimens and tissues and the corresponding recording and reporting of test results to appropriate services.

5.3.2. DEFINITIONS:

Clinical Pathology - Encompasses the functions of chemistry, urinalysis, hematology, microbiology, serology, and blood banking.

Anatomical Pathology - Comprises histopathology, cytology, electron microscopy, photomicrography, autopsy, and cytogenetics.

Laboratory Module - Represents the space, storage, and equipment required for two technicians to work comfortably and efficiently. It provides each technician with sit-down workspace with chair and storage. Shared services include a sink and refrigerator and space for placement of freestanding equipment without encroaching upon circulation space.

5.3.3. POLICIES:

The concept of operation for pathology is based on the separation of the physical facilities into two functional divisions: clinical and anatomical pathology. It is also based on the central control for specimen processing, whereby specimens are received and logged at one point and distributed to appropriate work centers based on priority of accomplishment required. Reports of analysis are returned to the same central control point that completes the chain of action. The work areas are composed primarily of laboratory modules in standard configurations grouped according to function.

The standard operation of pathology is based on 8 hours per day, 5 days per week. However, the STAT Lab portion of clinical pathology normally operates 24 hours per day, 7 days per week. Specimen receiving includes desk space, machine stand and access to a refrigerator/freezer, material handling terminal and cart storage if applicable.

Transcription provides space for central dictation recording equipment and individual areas for transcriptionists including area for a desk, dictation outlet, computer terminal (if possible), and machine stand.

Record storage provides space for the file storage of laboratory records and reports in a standard filing cabinet arrangement.

Storage space is provided for open shelf storage units with an entirely separate, securable storage area for hazardous materials, refrigerator/freezer storage for bulk products

Media and solution preparation -- space is provided for a standard laboratory module with a fume hood.

Decontamination includes space for work counter with sink, storage and sufficient space and circulation to accommodate soiled material carts.

Open lab space is provided for standard laboratory modules grouped without dividing partitions.

Blood bank -- space is provided for separate, environmentally remote standard lab modules with sufficient space and access for unit blood refrigerator and attendant alarm systems, as well as space for donor areas.

Microbiology labs -- space is provided for standard laboratory modules with separate, enclosed modules for each discipline; each provided with sufficient space for a laminar fume hood. Space for a prefabricated type, insulated walk-in incubator is provided.

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Histopathology -- Work centers include space for gross specimen cutting area with sink, accessible instrument display, fume hood, dictation apparatus and storage; a paraffin impregnation area with sufficient space and clearance to accommodate automated machines and block cooling; a frozen sections preparation area, including space for microtome knives and cryostats; a slide staining and preparation area with slide storage and fume hood; microscope viewing area, including space for dictation. This allowance does not dictate the distribution of the space to a specific function; rather, it provides adequate space that will be allocated to functions during the design process.

Tissue specimen storage space is provided with open shelving for the storage of boxed paraffin blocks and bottled gross specimens, and an area for slide files.

Cytology lab space is provided for standard laboratory modules within one enclosed area, including space and access for fume hood, slide staining and separation and storage.

Autopsy/morgue space is provided for an autopsy table with four-sided access, a gross cutting area, scale, limited refrigeration facilities and storage facilities for specimen displays. Space is also provided for refrigerated storage of cadavers and access to the rollout shelves when fully extended. Cleanup space is provided including a scrub sink, clean supply and instrument storage, and work counter.

Graduate medical education and other training programs will be considered when planning training space. Individual study and specific justification must be provided by the facility.

5.3.4. PROGRAM DATA REQUIRED:

Chemistry

Hematology

Immunology/Serology

Urinalysis

Microbiology

Parasitology/feces

Blood banking

Histopathology

Cytology

Virology

AIDS

Staffing requirements:

Annual autopsy procedures.

Annual average deaths.

Annual whole blood donations.

Annual phoresis donations.

5.3.5. SPACE CRITERIA:

Reception/Patient Areas

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FUNCTION	Room Code	AUTHORIZED		PLANNING RANGE/COMMENTS
		m^2	nsf	
Reception	RECP1	11.15	120	Per department.
Blood Drawing Area (GP)	LBVP1	18.58	200	Min, add 60 nsf per station in excess of two.
Waiting Area	WRC01	9.29	100	Minimum. Three seats per station at 16 nsf per seat, 25 nsf per handicapped seat. .
Specimen Toilet	TLTU1	4.65	50	1 wc, 1 lav single occupancy per increment of 30 specimens/day.
Point of Service (Satellite Lab)	LBSP1	9.29	100	To be used in clinics only.
MINIMAL CLINICAL LAB				
Specimen Receiving	LBSS1	9.29	100	Minimum.
Chemistry (GP)	LMCH1	13.01	140	Minimal
Hematology (GP)	LMHI1	27.87	300	Minimal
Urinalysis (GP)	LMU01	13.01	140	Minimal
Microbiology (GP)	LMM01	24.15	260	Minimal
Central Storage	SRS01	9.29	100	Minimal
SMALL CLINICAL LAB				
Shipping & Receiving	LBSS2	21.37	230	Small
Chemistry (GP)	LMCH2	42.73	460	Small
Hematology (GP)	LMHI2	33.44	360	Small
Histology	LMHS1	20.44	220	Small
Urinalysis (GP)	LMU02	20.44	220	Small
Microbiology (GP}	LMM02	33.44	360	Small
Glassware Washing	LBGW1	9.29	150	Small
Central Storage	SRS01		150	Small
MEDIUM CLINICAL LAB				
Shipping & Receiving	LBSS3	18.58	200	Medium
Chemistry (GP)	LMCH3	58.53	630	Medium
Hematology (GP)	LMHI3	39.02	420	Medium
Histology	LMHS1	20.44	220	Small
Urinalysis (GP)	LMU03	25.08	270	Medium
Microbiology (GP)	LMM03	69.68	750	Medium
Histopathology (GP)	LMHC1	20.44	220	Medium

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FUNCTION	Room Code	AUTHORIZED		PLANNING RANGE/COMMENTS
		m^2	nsf	
Microscope Slides Storage	SRL01	5.57	60	Minimum, one per histopathology
Paraffin Block Storage	SRL02	5.57	60	Minimum, one per histopathology
Solution and Media Preparation	LBSM1	20.44	150	Medium lab, provide 220 nsf large lab
Decontamination Room	LBDR1	9.29	100	One per medium and large lab
Tissue Storage	LBTS1	9.29	100	One per histology department.
Glassware Washing	LBGW1	9.29	150	Medium.
Storage/Central	SRS01		200	Medium.
LARGE CLINICAL LAB				
Shipping & Receiving	LBSS4	27.87	300	Large
Chemistry	LMCH4	111.48	1200	Large
Hematology	LMHI4	148.64	1600	Large
Histology	LMHS2	55.74	600	Large
Urinalysis	LMU04	18.58	200	Large
Microbiology	LMM04	148.64	1600	Large
Histopathology	LMCH2	78.04	840	Large
Microscope Slides Storage	SRL01	5.57	60	Minimum, one per histopathology
Paraffin Block Storage	SRL02	5.57	60	Minimum, one per histopathology
Solution and Media Preparation	LBSM1		220	provide 220 nsf large lab
Decontamination Room	LBDR1	9.29	100	One per large lab.
Tissue Storage	LBTS1	9.29	100	
Glassware Washing	LBGW1	9.29	150	
Central Storage	SRS01		220	220 nsf large

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FUNCTION	Room Code	AUTHORIZED m^2	AUTHORIZED nsf	PLANNING RANGE/COMMENTS
ADDITIONAL LAB MODULES				
Cytology	LMCY1	14.86	160	Small
Flow cytometer	LBFC1	14.86	160	Do we need this?
Parasitology/feces	LMMP1	23.23	250	
Micology	LMMY1	27.87	300	
Virology	LMV01			
	LMV02			
Toxicology	LMT01	14.86	160	
Blood Gas Lab	LBBG2			
Cytogenetics Preparation	LBCP1	11.15	120	Do we need to keep?
Cytogenetics Reading Room	LBCR1	11.15	120	Do we need to keep?
Tissue Storage	LBTS1	9.29	100	
Glassware Washing	LBGW1	9.29	150	
Storage/Central	SRS01	9.29	100	Minimal, 150 nsf small lab, 200 nsf medium, 220 nsf large
Blood Donor/Bank Center				
Blood Banking, Small (GP)	LMBB1	18.58	200	One refrigerator, one freezer.
Blood Banking, Medium (GP)	LMBB2	66.89	720	Four refrigerators, two freezers.
Blood Banking, Large (GP)	LMBB3	92.90	1000	Three refrigerators, four freezers
Blood Donor Interview Area	PAIA1	7.43	80	One per four blood stations
Donor Station	LBBD1	18.58	200	Minimum, add 60nsf for each station over two
Recovery Area	WRC01	13.94	150	Per facility.

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FUNCTION	Room Code	AUTHORIZED m^2	AUTHORIZED nsf	PLANNING RANGE/COMMENTS
Phoresis Process Laboratory	LBBD2	11.15	120	If in concept of operations
Basic Blood Shipping	LBBS1	7.43	80	One refrigerator, one freezer.
Frozen Blood Shipping	LBBS2	9.29	100	Three freezers.
Anatomical Pathology				
Tissue Storage	LBTS1	5.57	60	Per department.
Autopsy Room (GP)	LBAR1	27.87	300	Per table. Number of tables = Annual Autopsy Procedures / 200.
Locker room	LR002	9.29	60	Two at 60 nsf each per department.
	TLTU1	4.65	50	Per fixture; staff toilets
	SHWR1	5.57	60	Per shower
Morgue Refrigerator	LBMR1	2.32	25	Per space. Number of Spaces = Annual Average Deaths / 50 (Round at 0.2) (One minimum)
Walk-in Morgue Refrigerator	LBMR2	2.32	25	If in concept of operations. Per space. Number of Spaces = Annual Average Deaths / 50 (Round at 0.2) (One minimum)
Body Prep Room	LBBP1	9.29	100	1 per facility where no autopsy room is provided.
Body Viewing Room	LBBV1	9.29	100	1 per facility
Pathological Waste Holding	UTC01	3.72	40	Plus 20 nsf per 10 modules greater than 15. 150 nsf maximum.
Archives and Records	FILE1	7.43	80	Space allocation required. Individual study.
Medical Photography – Non GME and GME Program (Requires special justification)				
Private Office	OFA01	11.15	120	Standard furniture. One per projected FTE.
	OFA02			System furniture.
NCOIC/LCPO/LPO/SMT office	OFA01	11.15	120	Standard furniture. One per projected FTE.
	OFA02			System furniture.
Administrative Cubicle	OFA03	5.57	60	One per FTE at 60 nsf.

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FUNCTION	Room Code	AUTHORIZED m^2	AUTHORIZED nsf	PLANNING RANGE/COMMENTS
Dark Room	MIDR1	13.94	150	Non GMR program.Includes film processors and enlarger
		27.87	300	GME program.
Print Processor Area	MIPP1	9.29	100	For Non GME and GME programs. Both Black/White and Color.
Medical Studio	MIST1	13.94	150	Non GME program.
		37.16	400	GME program.
Dressing Room/Cubicle	DR001	4.65	50	Includes one booth, either Non GME or GME program..
Copy Laboratory	MICL1	55.74	600	Only for GME program. Includes light side of copy camera.
Finishing Area	MIPF1	13.94	150	Only for GME program. For assembly and distribution of final projects.
Full Length Studio	MIST1	37.16	400	Only for GME program. For full-length medical photography.
Freestanding Refrigerator	SRR02	3.72	40	Only for GME program. Film and supply breakout.
Freestanding Freezer	SRF02	3.72	40	Only for GME program. Film and paper storage.
Supply and Storage	SRS01	4.65	50	One per Non GME program.department.
		9.29	100	One per GME program.
Chemical Storage	SRHM1	11.15	120	For Non GME and GME program. One per departrment.
STAFF AND ADMINISTRATIVE AREAS				
Pathology Director	OFA01	11.15	120	Private office, standard furniture per projected FTE.
	OFA02			Private office, system furniture
Secretary with Waiting	SEC01	11.15	120	One per projected FTE.
Private Office	OFA01	11.15	120	One per projected FTE requiring a private office.
	OFA02			
NCOIC/LCPO/LPO/SMT Office	OFA01	11.15	120	Private office. One per projected FTE.
	OFA02			
Conference/ Training Room	CRA01	18.58	200	Minimum for staff of eight officers/officer equivalents. See Section 2.1
Administrative Cubicle	OFA03	5.57	60	System furniture cubicles. One per FTE authorized. Refer to Chapter 2.1.
Tumor Registry Cubicle	OFA03	5.57	60	Per projected FTE.
File	MRS01	5.57	60	One per department.
Copy Room	RPR01	11.15	120	One per department.
Staff Lounge (GP)	SL001	13.01	140	Minimum. See Section 6.1 for increase in size
Personal Property Lockers (GP)	LR001	1.86	20	For staff without a dedicated office/cubicle space. See Section 6.1 for increase in size or for Locker Room, Changing criteria.

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FUNCTION	Room Code	AUTHORIZED		PLANNING RANGE/COMMENTS
		m^2	nsf	
Staff Toilets (GP)	TLTU1	4.65	50	Minimum for total staff of at least 10. See Section 6.1 for increase in size and for male/female breakdown.
Phase II Instructor Office	OFA01 OFA02	11.15	120	Private office. One per projected FTE.
Phase II Classroom	CLR02			
Phase II Personal Property Lockers	LR001	1.86	20	For staff without a dedicated office/cubicle space. See Section 6.1 for increase in size or for Locker Room, Changing criteria.